

**SEIKO**  
**RNH942209R1A**  
**COF ( Chip On Flex) Process**

**General Specifications:**

1.1	Display type:	COLOR STN
1.2	Display color: *	* Note 1
	Display Color:	65K Color
	Background: *	* Note 2
	Black (Red, Green, Blue dots are off state)	
1.3	Controller	HD667A66
1.4	Polarizer mode:	Transmissive/ Negative
1.5	Viewing Angle:	6:00 o'clock
1.6	Duty Ratio	1/128 Duty
1.7	Backlight Type:	LED ( 1 LAMP )
	Backlight Color:	WHITE
1.8	Dot Matrix:	128 X 128 Dots
1.9	Weight: *	TBD * Note 3
1.10	Power Supply Voltage:	
1.11	LED Backlight Voltage:	
1.12	Outline Dimensions:	Refer to outline on next page

\* Note1: Color tone is slightly changed by temperature and driving voltage.

\* Note 2: Color tone will be changed by backlight.

\* Note 3: TBD: To Be Determined.

## 2.1 Interface Signals

Pin No.	Symbol	Description
1	Reset	Reset Pin
2	Gnd	Ground
3	VCC	Power Supply +
4	CS	Chip Select
5	RS	Display/Control Data Select
6	WR	Write Enable
7	RD	Read Enable
8	D8	Data Bus 0
9	D9	Data Bus 1
10	D10	Data Bus 2
11	D11	Data Bus 3
12	D12	Data Bus 4
13	D13	Data Bus 5
14	D14	Data Bus 6
15	D15	Data Bus 7
16	GND	Ground
17	N/C	
18	ANODE	LED ANODE
19	CATHODE	LED CATHODE

### **3. Precautions for Use of LCD Modules**

#### **3.1 Handling Precautions**

- 3.1.1 The display panel is made of glass. Do not subject it to a mechanical shock by dropping it from a high place, etc.
- 3.1.2 If the display panel is damaged and the liquid crystal substance inside it leaks out, be sure not to get any in your mouth, if the substance comes into contact with your skin or clothes, promptly wash it off using soap and water.
- 3.1.3 Do not apply excessive force to the display surface or the adjoining areas since this may cause the color tone to vary.
- 3.1.4 The polarizer covering the display surface of the LCD module is soft and easily scratched. Handle this polarizer carefully.
- 3.1.5 If the display surface is contaminated, breathe on the surface and gently wipe it with a soft dry cloth. If still not completely clear, moisten cloth with one of the following solvents:
  - Isopropyl alcohol
  - Ethyl alcohol

Solvents other than those mentioned above may damage the polarizer. Especially, do not use the following:

- Water
- Ketone
- Aromatic solvents

- 3.1.6 Do not attempt to disassemble the LCD Module.
- 3.1.7 If the logic circuit power is off, do not apply the input signals.
- 3.1.8 To prevent destruction of the elements by static electricity, be careful to maintain an optimum work environment.
  - a. Be sure to ground the body when handling the LCD Modules.
  - b. Tools required for assembly, such as soldering irons, must be properly ground.
  - c. To reduce the amount of static electricity generated, do not conduct assembly and other work under dry conditions.
  - d. The LCD Module is coated with a film to protect the display surface. Be careful when peeling off the protective film since static electricity may be generated.

### 3.2 Storage Precautions

- 3.2.1 When storing the LCD modules, avoid exposure to direct sunlight or to the light of fluorescent lamps.
- 3.2.2 The LCD modules should be stored under the storage temperature range. If the LCD modules will be stored for a long time, the recommended condition is:

Temperature:	0 C ~ 40 C
Relative humidity:	< 80%

- 3.2.3 The LCD modules should be stored in the room without acid, alkali and harmful gas.
- 3.2.4 The LCD modules should be no falling and violent shocking during transportation, and also should avoid excessive press, water, damp and sunshine.